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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/730,217

12/05/2000

Ronald M. Wexler

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09/10/2004

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EXAMINER

JONES, DAVID

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/730,217

Applicant(s)

WEXLER ET AL.

Examiner

David L Jones

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-54 is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4 and 6.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 12/5/2000 was filed with the application on 12/5/2000. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.
2. The information disclosure statement (IDS) submitted on 3/26/2001 was filed after the filing date of the application on 12/5/2000, but before the first action on the merits. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Drawings***

3. The drawings were received on 3/26/01. These drawings are accepted.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neff et al. (US 5,841,885) and further in view of Benoit et al. (US 6,270,610).

**Regarding claim 1**, Neff et al. (Neff) teaches a method for recording an image and information pertaining to such image on an output medium, comprising the steps of:

recording an image (column 3, lines 42-67) on the output medium; and

producing information (column 4, lines 1-12) pertaining to such image and recording such information pertaining to the image on the output medium. However, Neff does not explicitly teach printing on an oriented polymer.

Benoit et al. (Benoit) teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. Further, Benoit teaches (column 10, lines 41-47) that the system is particularly advantageous for printing banknotes.

Neff and Benoit are analogous art because they both are from the same field of endeavor of print medium processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the biaxially oriented polymer of Benoit with the printing system of Neff.

The suggestion/motivation for doing so would have been to provide the paper with high bond strength between the layers of the medium.

Therefore, it would have been obvious to combine Neff with Benoit to obtain the invention as specified in claim 1.

**Regarding claim 2**, Neff teaches a method for recording an image and information pertaining to such image on an output medium. However, Neff does not explicitly teach printing on an oriented polymer. Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67).

**Regarding claim 3**, Neff teaches a method for recording an image and information pertaining to such image on an output medium. However, Neff does not explicitly teach printing on an oriented polymer. Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67).

**Regarding claim 4**, Neff teaches a method for recording an image and information pertaining to such image on an output medium. However, Neff does not explicitly teach printing on an oriented polymer. Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67). As taught by Benoit, there are two layers of high-density polyethylene (HDPE) with copolymer polypropylene skins on both sides to form layers A and B. The layers A and B were then biaxially oriented 1.4 times in the machine direction and 6 to 12 times in the transverse direction.

**Regarding claim 7**, Neff teaches a method for recording an image and information pertaining to such image on an output medium. However, Neff does not explicitly teach printing on an oriented polymer. Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67). As taught by Benoit, there are two layers of high-density polyethylene (HDPE) with copolymer polypropylene skins on both sides to form layers A and B. The layers A and B were then biaxially oriented 1.4 times in the machine direction and 6 to 12 times in the transverse direction. Further, Benoit teaches that voided films can be used as well in the process (column 6, lines 51-65).

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neff et al. and Benoit et al. as applied to claims 1-4, and 7 above, and further in view of Shaw et al. (US 6,218,004).

**Regarding claim 5**, Neff teaches a method for recording an image and information pertaining to such image on an output medium. Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67). However, Neff does not explicitly teach printing on an oriented polymer, and neither teaches explicitly utilizing a hindered amine stabilizer.

Whereas, Shaw et al. (Shaw) teaches a method of production of sheet materials for paper or films. Shaw teaches incorporating additives such as UV light stabilizers, UV photoinitiators and UV photosensitizers. UV light stabilizers such as hindered amines can be incorporated.

Neff, Benoit, and Shaw are analogous art because they are from the same field of endeavor of print medium processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the UV light stabilizers of Shaw to the biaxially oriented polymer of Benoit and with the printing system of Neff.

The suggestion/motivation for doing so would have been to provide the films with an inhibited polymer degradation layer.

Therefore, it would have been obvious to combine Neff and Benoit with Shaw to obtain the invention as specified in claim 5.

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**Regarding claim 6**, Neff teaches a method for recording an image and information pertaining to such image on an output medium. Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67). However, Neff does not explicitly teach printing on an oriented polymer, and neither teaches explicitly utilizing a hindered amine stabilizer.

Whereas, Shaw et al. (Shaw) teaches a method of production of sheet materials for paper or films. Shaw teaches incorporating additives such as UV light stabilizers, UV photoinitiators and UV photosensitizers. UV light stabilizers such as hindered amines can be incorporated.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the hindered amine light stabilizer to each layer of the polymer to help inhibit polymer degradation.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hidaka (US 6,344,900) and further in view of Benoit et al. (US 6,270,610) and further in view of Miyazaki (US 6,529,288).

**Regarding claim 8**, Hidaka teaches (column 6, lines 34-67) a method of recording an image on a print medium and adjusting the original image characteristics taking into consideration the luminance and chrominance of the image. Hidaka (column 8, lines 38-47) then adjusts the image to take into the consideration the limited characteristics of the output medium and prints the image on output medium. It would have been obvious to one of ordinary skill in the art at the time the invention was made that Hidaka is taking into consideration the color

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gamut of the original image and adjusting for the both types of inks used, printer values, and paper to be used. However, Hidaka does not explicitly teach printing information on the output with respect to the image or using a biaxially oriented polypropylene.

Whereas, Benoit teaches (column 5, lines 38-58) a method of manufacturing a biaxially oriented polymer. The polymer includes polypropylene (column 9, lines 50-67). As taught by Benoit, there are two layers of high-density polyethylene (HDPE) with copolymer polypropylene skins on both sides to form layers A and B. The layers A and B were then biaxially oriented 1.4 times in the machine direction and 6 to 12 times in the transverse direction.

Further, Miyazaki teaches (column 6, lines 48-56) the ability to print the information pertaining to the image as a barcode, the barcoded information may contain particular information concerning the image e.g. a title, date of photography, name, content of the image, and possible memory location where the image data of the image is located.

Hidaka, Benoit, and Miyazaki are analogous art because they both are from the same field of endeavor, print image processing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the ability to print the information pertaining to an image of Miyazaki, with the biaxially oriented polymer of Benoit and with the system of Hidaka.

The suggestion/motivation for doing so would have been to provide both the ability to have the entire image information on the print in an inconspicuous manner and by utilizing a biaxially oriented polymer it provides the paper with high bond strength between the layers of the medium.



Therefore, it would have been obvious to combine Benoit and Miyazaki with Hidaka to obtain the invention as specified in claim 8.

***Allowable Subject Matter***

8. Claims 9-54 are allowed.

9. The following is an examiner's statement of reasons for allowance:

The instant application recites a limitation, determining a residual image representing a difference between an extended color gamut and a limited color gamut of the output medium; and

recording the residual image on the output medium using a digital encoding means such that the residual image and the limited color gamut output print is adapted to be used to form a reconstructed extended color gamut digital image, whereby an improved image is provided on the output medium.

The features identified, in combination with other claim limitations are neither suggested nor discussed by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yamamoto (US 6,430,376) discloses an image processing apparatus that utilizes a barcode and reader to find the information of an image.

Nakamura (US 5,968,719) discloses a method of printing information of an image on the edge of film utilizing barcoded information.

Fuchsberger (US 4,831,434) discloses a method of correcting an image for printing that takes into consideration the luminance and chrominance values of the output medium.

Silverbrook (US 6,305,770) discloses a method of printing an image from a video camera that includes printing a thumbnail of the image along side an encoded form of the image.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L Jones whose telephone number is (703) 305-4675. The examiner can normally be reached on Monday - Friday (7:00am - 3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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